

REMARKS

Applicant thanks the Examiner for acknowledging the claim for priority under 35 U.S.C. § 119, and receipt of a certified copy of the priority document submitted February 13, 2004.

Applicant thanks the Examiner for considering the references cited with the Information Disclosure Statement filed February 13, 2004.

Status of the Application

Claims 1-23 are all the claims pending in the Application, as claims 11-23 are hereby added to more fully define the current invention. Claims 1-4, 6 and 8-10 stand rejected.

Allowable Subject Matter

Applicant thanks the Examiner for indicating that dependent claims 5 and 7 would be allowed if rewritten in independent form. Accordingly, Applicant adds new independent claims 17, 18 and 19. Claim 17 corresponds to allowable claim 5 rewritten in independent form. Claim 18 corresponds to allowable claim 5 rewritten in independent form, but without the features of intervening dependent claim 4. Claim 19 corresponds to allowable claim 7 rewritten in independent form. It is respectfully submitted that each of these new claims are immediately allowable.

Claim Rejections

The Examiner has rejected claims 1 and 4 under 35 U.S.C. § 102(b) as being anticipated by *Rosas et al.* (US 5,649,687; hereinafter “*Rosas*”). Additionally, the Examiner has rejected, under 35 U.S.C. § 103(a): (1) claims 2 and 3 as being unpatentable over *Rosas* in view of *Heyland* (US 4,317,467; hereinafter “*Heyland*”); (2) claims 8-10 as being unpatentable over

Rosas in view of *Hooybar et al.* (5,152,500; hereinafter “*Hooybar*”); and (3) claim 6 as being unpatentable over *Rosas* in view of *Cross et al.* (5,172,887; hereinafter “*Cross*”). These rejections are respectfully traversed.

Independent Claim 1

The Examiner alleges that *Rosas* discloses all of the features of independent claim 1. Applicants respectfully disagree, and submit that *Rosas* fails to teach or suggest at least that “the valve is shaped to comprise a wider first outer diameter at the top surface thereof, and a thinner second outer diameter at a portion surrounding the tip of the moving part.”

Specifically, *Rosas* only discloses a valve head 16 with a constant outer diameter, not respective wider and thinner diameters.

Thus, Applicant respectfully submits that independent claim 1 is patentable over the applied reference. Further, Applicant respectfully submits that rejected dependent claims 2-4, 6 and 8-10 are allowable, *at least* by virtue of their dependency.

Additionally, Applicant respectfully submits that rejected dependent claims 2-4, 6 and 8-10 are separately patentable over the applied references.

For example, while the Examiner alleges that a combination of *Rosas* and *Heyland* would teach or suggest all of the features of dependent claim 2, Applicant disagrees.

Specifically, the Examiner takes the position that *Rosas* discloses many of the features recited in claim 2, but fails to teach or suggest the recited “stopper.” Applicant agrees that *Rosas* is deficient at least in this regard. Nevertheless, the Examiner applies *Heyland*, taking the position that it discloses stop means 58 and 60, and that it would have been obvious to add these features to *Rosas* “for better valve control and durability.”

In contrast, Applicants respectfully submit that one of ordinary skill in the art (“one of skill”) at the time of the invention would not have been motivated to modify *Rosas* in view of *Heyland* as the Examiner has alleged. It has long been held that the Examiner must “show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for a combination in the manner claimed.” *In re Rouffet*, 47 USPQ2d 1453 (Fed.Cir. 1998). The mere fact that references can be “combined or modified does not render the resultant combination [or modification] obvious unless the prior art also suggests the desirability of the combination [or modification].” *In re Mills*, 916 F.2d 680 (Fed.Cir. 1990); MPEP §2143.01.

Here, *Rosas* discloses a valve head 16 that is firmly seated on valve seat 22 (see FIG. 1), and which is maintained thereon to prevent fluid flow from inlet conduit 18 to outlet conduit 26. In contrast, the stop means 58 and 60 of *Heyland* are very specific features provided to allow diaphragm 34 to be deformed for pressure release. No such pressure release is contemplated in *Rosas*, nor would the structure of valve head 16 of *Rosas* allow any deformation similar to that of diaphragm 34 of *Heyland*. Accordingly, the stop means 58 and 60 of *Heyland* would have no use in the system of *Rosas*, and one of skill would not have been motivated to modify *Rosas* to include these features.

Thus, Applicant respectfully requests that the Examiner withdraw the above rejections.

New Claims

Claims 11-23 are hereby added.

Claims 11-16 are new dependent claims which are dependent either directly or indirectly from independent claim 1. Claims 11-16 are fully supported *at least* by FIGS. 5-7 of the instant

Application, along with their accompanying description. Claims 11-16 are respectfully submitted to be allowable both by virtue of their dependency, and by virtue of the features recited therein.

Claims 17-19 are discussed above.

Claim 20 corresponds to original dependent claim 2 rewritten in independent form, and is respectfully submitted to be allowable at least for the reasons discussed above with respect to claim 2. Claim 21 corresponds to original dependent claim 3 rewritten to depend from new claim 20.

Claims 22 and 23 generally correspond to original claims 2 and 6 rewritten in an alternative form. Claims 22 and 23 are fully supported at least by FIG. 1 of the instant Application, along with its accompanying description. Claims 22 and 23 are respectfully submitted to be allowable by virtue of the features recited therein.

Conclusion

In view of the foregoing, it is respectfully submitted that claims 1-23 are allowable. Thus, it is respectfully submitted that the application now is in condition for allowance with all of the claims 1-23.

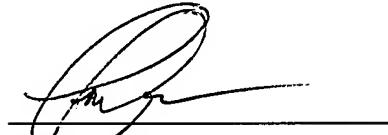
If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.111
U.S. Appln. No. 10/777,175

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Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,



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